

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Interference Immunity Performance Specifications for Radio Receivers	)	ET Docket No. 03-65
	)	
Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television	)	MM Docket No. 00-39
	)	

To: The Commission

**COMMENTS OF  
NATIONAL PUBLIC RADIO, INC.**

**Introduction**

National Public Radio, Inc. ("NPR") hereby submits its Comments regarding the Notice of Inquiry concerning interference immunity performance characteristics of radio receivers.<sup>1</sup>

NPR is a non-profit membership corporation that produces and distributes noncommercial educational programming through more than 700 noncommercial educational ("NCE") stations nationwide. In addition to broadcasting award winning NPR programming, including *All Things Considered*<sup>®</sup>, *Morning Edition*<sup>®</sup>, *Talk Of The Nation*<sup>®</sup>, and *Performance Today*<sup>®</sup>, NPR's Member stations are significant producers of news, informational, and cultural programming. NPR also operates the Public Radio Satellite Interconnection System and provides representation and other services to its Member stations.

The purpose of this proceeding is to examine the capabilities of modern radio receivers

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<sup>1</sup> Interference Immunity Performance Specifications for Radio Receivers, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Inquiry, ET Docket No. 03-65, MM Docket No. 00-39 (rel. Mar. 24, 2003).

with the objective of increasing the efficiency of spectrum use.<sup>2</sup> NPR and its affiliated stations appreciate and support this inquiry. The FM spectrum reserved for NCE use is immediately adjacent to the television channel 6 spectrum, and reserved FM NCE stations have long been required to protect reception of television channel 6 stations, principally by limiting their service to the public. As set forth below, we believe this proceeding offers an important opportunity for the Commission to facilitate more efficient use of the reserved FM NCE spectrum by addressing the channel 6 interference issue at its root -- the performance characteristics of television receivers -- with the ultimate object of eliminating the need for reserved FM NCE stations to minimize their facilities to protect television channel 6 stations from interference.

**The Time Has Come For A Reexamination of Section 73.525 of the Commission's Rules,  
Which Requires Reserved FM Band NCE Stations to Protect Adjacent  
Television Channel 6 Stations at the Expense of NCE Service**

In initiating the instant inquiry into radio receiver performance specifications, the Commission has expressed a general preference for voluntary, industry-led standard setting rather than government-mandated standards.<sup>3</sup> As a general proposition, such a preference makes abundant good sense. The private sector, including equipment providers and related industry groups, is best positioned to identify relevant technical and cost considerations and anticipate changes in technology. As the Commission also recognizes, however, there are exceptional circumstances in which the Commission's regulatory intervention is required to remedy a market failure and protect the public interest.<sup>4</sup> In some cases, however, the Commission's intervention

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<sup>2</sup> Id. at ¶ 1.

<sup>3</sup> Id. at ¶ 18.

<sup>4</sup> Id.

to address a market failure can act as an obstacle to the market's proper functioning and otherwise harm the public interest. Section 73.525 of the Commission's rules is just such a regulation.

Since 1985, Section 73.525 of the Commission's Rules has required reserved FM band NCE stations to protect the signals of adjacent channel 6 television licensees.<sup>5</sup> In particular, new reserved FM band NCE stations and stations that have sought to modify their facilities since 1985 have been required to demonstrate that the modified facility would not result in new interference to the television channel 6 reception of no more than a specified number of persons.<sup>6</sup>

The Commission adopted Section 73.525, even though the evidence before it established that interference by a reserved FM NCE station to reception of an adjacent television channel 6 station was attributable to a relatively minor design flaw in television receivers.<sup>7</sup> As the Commission previously noted: "The problem is widely recognized as a problem in the design of the television receiving system. Television sets have been designed in such a way that under certain conditions they are unable to reject the undesired FM signal."<sup>8</sup> Notwithstanding the actual cause of the problem, the Commission adopted a regulatory provision generally requiring NCE broadcast stations to limit their facilities and coverage areas to avoid interference to the reception of television channel 6 stations. The direct consequence of Section 73.525 has been to limit the service that NCE stations throughout the reserved portion of the FM band can offer to

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<sup>5</sup> 47 C.F.R. § 73.525; see Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations, Memorandum Opinion and Order, 58 R.R.2d 629, at 630-31 (1985) [hereinafter "Channel 6 Memorandum Opinion and Order"].

<sup>6</sup> 47 C.F.R. § 73.525(b)-(c).

<sup>7</sup> Channel 6 Memorandum Opinion and Order, 58 R.R.2d at 631.

<sup>8</sup> Public Notice, FCC 81-340, rel. July 22, 1981.

the public in the more than fifty television channel 6 markets that exist across the country,<sup>9</sup> covering nearly two thirds of the area of the United States.<sup>10</sup>

In the Commission's defense, the decision to sacrifice NCE service to protect television channel 6 reception was intended to be a temporary one.<sup>11</sup> Indeed, the Commission declined to address the actual cause of the interference problem -- the need for improved receiver performance -- because it believed private industry was in the process of developing voluntary standards.<sup>12</sup> In the almost twenty years since adopting Section 73.525, however, the Commission has never reexamined the issue to determine whether the adjacent channel interference that occurred at that time remains a problem.

To the extent today's television receivers remain incapable of rejecting adjacent reserved FM NCE signals, the Commission's policy actually removes any incentive for television receiver manufacturers to address the issue. Specifically, while the Commission assumed television receiver manufacturers would correct the design flaw in television sets, the Commission adopted a regulatory policy that required reserved FM stations to avoid causing interference to the reception of adjacent television channel 6 stations, thereby "remedying" the interference problem -- at least as far as the receiver manufacturers were concerned.

While the operation of Section 73.525 may be a textbook case of unintended

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<sup>9</sup> See 47 C.F.R. § 606.

<sup>10</sup> Comments of the University of Northern Iowa at 2, MM Docket No. 95-31 (filed Apr. 3, 2002).

<sup>11</sup> Channel 6 Memorandum Opinion and Order, 58 R.R. 2d at 629 ("[T]his proceeding has attempted to provide an interim solution.")

<sup>12</sup> See id., 58 R.R.2d at 632 ("[T]he [consumer electronics] industry appears to have every intention of developing improved immunity standards on its own.").

consequences, the matter is far from academic. The continuing presence of Section 73.525 has imposed a direct and significant cost on NCE FM radio service, contrary to a strong Federal interest in extending such service to all.<sup>13</sup> Indeed, it is hard to imagine a less efficient spectrum policy. NPR therefore believes the time has come for the Commission to redress a flawed regulatory policy so that NCE stations operating throughout the reserved FM spectrum can improve their varied services to the public.

The most direct means of achieving this objective would be for the Commission to propose the elimination of Section 73.525 in the course of a rulemaking proceeding devoted to this issue or to resolving a wider panoply of issues raised in this inquiry. Because this approach would not involve the Commission in standards-setting, it is consistent with the Commission's reliance on voluntary industry solutions to interference problems. Such an approach would also remove a regulation that only serves to inhibit the proper functioning of the consumer electronics market and the availability of noncommercial educational services to the public.

Significantly, we believe improvements in television set design in the two decades since the adoption of Section 73.525 may already have eliminated the need to require reserved FM radio stations to protect adjacent television channel 6 stations.<sup>14</sup> After all, the design flaw that

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<sup>13</sup> 47 U.S.C. § 396(a).

<sup>14</sup> We recognize that the Commission may have to implement the repeal of Section 73.525 over time to accommodate older, insufficiently immune television receivers that may still be in use in significant numbers. Such a phased-in repeal need not occur over a lengthy period of time, however, given the statutorily mandated termination of analog service in 2006, 47 U.S.C. § 309(j)(14)(A), and the Commission's commitment to rapidly transitioning the country to digital television reception. See In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television, MM Docket No. 00-39, 17 FCC Rcd at 15978, 15596 (rel. Aug. 9, 2002) (adopting a phased in requirement that new television receiving equipment include tuners to receive and decode over-the-air digital television signals).

rendered television sets in 1985 insufficiently immune from adjacent interference was understood at the time to be a relatively minor one to remedy. With the advent of digital television, moreover, television sets were promised to be more immune to the type of interference posed by an upper adjacency service.<sup>15</sup>

In any event, receiver manufacturers would have ample opportunity to respond to a notice of proposed rulemaking proposing the elimination of Section 73.525 with evidence to demonstrate why analog and digital television receivers would still suffer interference from reserved FM NCE stations that otherwise comply with applicable Commission technical standards. If television receivers are still generally incapable of rejecting adjacent reserved FM radio signals, moreover, a rulemaking proceeding can also identify the specific design problem and begin the standard setting process to remedy the problem.

In particular, if there is a need to redress a residual design problem, the Commission could direct television receiver manufacturers to develop the necessary channel sensitivity, selectivity, and interference immunity standards. There are abundant examples of comparable Commission-directed initiatives in other contexts.<sup>16</sup> Indeed, we note that the Advanced

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<sup>15</sup> See In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Sixth Report and Order, 12 FCC Rcd 14,588, 14657-58 (1997) (noting that, according to television industry representatives, "improved performance capabilities of DTV receivers will reduce the potential for interference between DTV channel 6 and FM radio service.").

<sup>16</sup> For instance, the Commission has mandated a range of standards to assure greater compatibility between cable television service and consumer electronics equipment. In the Matter of Compatibility Between Cable Systems and Consumer Electronics Equipment, Notice of Proposed Rulemaking, PP Docket No. 00-67, 15 FCC Rcd 8776, at ¶ 14 (2000) ("In essence, then, our compatibility rules and scrambling limitations were designed to ensure that consumers could access a range of cable services using a 'cable-ready' television receiver without obtaining additional equipment from the cable operator.").

More recently, the Commission has shepherded the cable television and consumer

Television Systems Committee ("ATSC") is currently working to develop voluntary receiver standards for digital television receivers,<sup>17</sup> and the Commission could work to ensure that the resulting standards explicitly address the reserved FM/television channel 6 issue.<sup>18</sup>

The Commission possesses ample statutory authority to establish minimum performance standards for home electronic equipment, particularly including television receivers. Beyond the Commission's broad authority to manage the use of the radio frequency spectrum in the public interest,<sup>19</sup> Congress expressly authorized the Commission to adopt "reasonable regulations . . . establishing minimum performance standards for home electronic equipment and systems to reduce their susceptibility to interference from radio frequency energy."<sup>20</sup> As explained by the House and Senate Conferees, "television sets would be typical examples of equipment subsumed under the term 'home electronic equipment and systems.'"<sup>21</sup> Thus, Section 302a of the Communications Act expressly authorizes the Commission to establish minimum performance

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electronics industries to a memorandum of understanding intended to allow consumers to directly attach their DTV receivers to cable systems and receive cable television services without the need for an external navigation device. See Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment, Further Notice of Proposed Rulemaking, CS Docket No. 97-80, PP Docket No. 00-67, at ¶¶ 1-3 (rel. Jan. 10, 2003).

<sup>17</sup> See "Hope Renewed for Agreement on Digital Set Performance Standards," Communications Daily at 2, July 2, 2003.

<sup>18</sup> The Commission might also seek to address other single carrier interference issues, such as critically important public safety uses on spectrum adjacent to television spectrum.

<sup>19</sup> See 47 U.S.C. §§ 301, 303

<sup>20</sup> Id. § 302a(a).

<sup>21</sup> H.R. Conf. Rep. No. 765, 97th Cong., 2d Sess. 32 (1982) [hereinafter "Conference Report"].

standards for television sets to reduce their susceptibility to radio frequency interference.<sup>22</sup>

Significantly, Congress shared the Commission's general preference for voluntary industry standard setting in lieu of government-mandated standards. Congress recognized, however, that good faith industry attempts to solve interference problems in the market for devices "have not always been successful."<sup>23</sup> In the specific case of home electronic equipment, moreover, Congress found that regulatory intervention to insure the adequate protection of such equipment from radio-frequency interferences was necessary.<sup>24</sup>

Thus, to the extent modern television receivers still suffer adjacent channel interference from reserved FM NCE stations, there is both ample authority and compelling justification for the Commission to mandate the establishment of minimum television receiver standards to resolve the reserved FM/television channel 6 issue. Such mandatory minimum performance standards, if necessary, would eliminate the need for Section 73.525.

In closing, this Commission has sought to scrutinize its regulatory policies in a variety of areas to ensure that they continue to serve the public interest, and it has not hesitated to eliminate those that have outlived their utility. Particularly in the case of Section 73.525, we believe reexamination is in order. By pursuing the eventual repeal of Section 73.525, the Commission can simultaneously contribute to the proper functioning of the consumer electronics marketplace and foster an unprecedented expansion of NCE service to the public through more efficient use of the reserved FM spectrum. Toward that end, we commend the Commission for initiating this

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<sup>22</sup> See, e.g., S. Rep. 191, 97th Cong., 2d Sess. 8 (1981) ("S. 929 would give the FCC the authority to require that receivers and other electronic devices be so designed and constructed as to meet minimum standards to be set by the FCC for rejection of unwanted radio signals and energy.")

<sup>23</sup> Conference Report at 32.



inquiry, and we look forward to working with the Commission.

### **Conclusion**

NPR commends the Commission for initiating this inquiry and urges the Commission to pursue the elimination of Section 73.525 of the Commission's rules by pursuing the repeal of that Section and, to the extent necessary, by directing the establishment of minimum television receiver standards to resolve the problem.

Respectfully submitted,

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